

CENTRAL REGIONAL LABORATORY

Data Checklist

Data Set AIR 20010053 AEP-Gavin

- Chain-of-Custody
- Analysis Request Form(s)*
- Sample Tags
- Transmittal Report w/signatures of the following
 - Peer reviewer
 - Data Management Coordinator

* Analysis Request Forms provide the data user a means to connect sample numbers with sampling locations

Prepared by Sylvia Griffin 11-7-01
Data Management Coordinator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: NOV 07 2001

Subject: Review of Region 5 Data for AEP-Gavin

From: K. Swan, Chemist *K. Swan*
Region 5 Central Regional Laboratory

To:

Attached are the results for: AEP-Gavin

CRL data set number: 20010053

Samples analyzed for: ICP Metals

Results are reported for sample designations: 2001AT01S01

NOV 07 2001

Data Management Coordinator and Date Received

Date Transmitted: NOV 07, 2001

Please have the U.S. EPA Project Manager/Officer complete the Customer Satisfaction Survey, attached, or call the CRL Sample Coordinator at 3-1226.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML-10C

/ /
Received by and Date

Comments:

Narrative Date: 11 07 01
Analyst: K. Swan
Batch Number: 20010053
Study: AEP-Gavin
Parameter: ICP Metals

ICP NARRATIVE for Data Set 20010053

One sample (2001AT01S01) were submitted for the analysis of ICP metals. The sample was collected on 1/6-7/01, received by the CRL on 2/26/01 and logged in on 8/03/01. The sample consisted of a very small amount of an ill-defined, flake-like, dark greenish substance

The sample was digested for ICP metals as is on 09 25 01 by K. Swan, following the 200.2 hot block standard digestion protocols for soil samples, but normal digestion QC could not be performed since there wasn't enough of the sample. The sample was digested past the six month hold time for metals. Sample analysis was performed on 10 02 01 and again on 11 06 01, following CRL SOP Metals004. The sample was rerun since maintenance had been performed on the instrument and better blank results and thus better low-level results were being obtained.

All analytical results files, sample information files and reformat files for ICP can be found on the R5CRL data server using the following paths: h:\r5crl\vol3\metals\Kswan\20010053\3300dv

The narrative, QC summary spreadsheets, sample result calculation spreadsheets and the final sample report for ICP can be found on the R5CRL data server using the following path:
h:\r5crl\vol3\metals\Kswan\20010053\Reports

Results file 20010043 1312 100601

The sample was digested and run along with data set 20010043, and the raw data for this run will be submitted with data for 20010043.

All instrument QC was low for Mo (78%) and Ti (85%) and Mo and Ti are flagged J. Reagent blank had very low levels of Al, Ba, Ca, Fe, Mg, and Mn, none of which will affect data quality. The second instrument blank had very low levels of Ca, Fe, and Mg, which will not affect data quality. Since normal digestion QC could not be performed due to insufficient quantity of sample, we can only refer to spike blank results and also the Laboratory Control Standard 0287, which yielded normal results. These two results were run on 10 02 01 and are found in Results file 20010043 1312 100201.

In summary, these results are usable and do not indicate high levels of toxic metals in this sample.

Narrative by: K Swan Chemist, USEPA
Date: 11 07 01

US EPA CRL - Region V
ICP Final Report Results

Sample Number: 2001AT01S01 Station ID: Fallout
Sample Batch Number: 20010053 Study: AEP-Gavin
Analysis Date: 11/06/01

<u>Element</u>	<u>Amount</u>	<u>Units</u>
Silver	1 U	mg/kg
Aluminum	9700	mg/kg
Boron	50	mg/kg
Barium	180	mg/kg
Beryllium	0.79	mg/kg
Calcium	22000	mg/kg
Cadmium	2 U	mg/kg
Cobalt	6.6	mg/kg
Chromium	15	mg/kg
Copper	13	mg/kg
Iron	9800	mg/kg
Potassium	590	mg/kg
Lithium	5.5	mg/kg
Magnesium	3700	mg/kg
Manganese	360	mg/kg
Molybdenum	10 U, J	mg/kg
Sodium	200 U	mg/kg
Nickel	15	mg/kg
Lead	10 U	mg/kg
Titanium	600 J	mg/kg
Vanadium	8.6	mg/kg
Zinc	66	mg/kg

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20010053

901019

ENVIRONMENTAL PROTECTION AGENCY
TOXIC RELEASE INVENTORY 8/3/2001

WATER

8/3/2001

VISIONS/BRANCH AIR SAMPLING SITE

NUMBER 901019 DATER NUMBER 2001053 STUDY BP-GAVIN

LAW ANNUAL DATE 2/26/01 REC'D DATE 8/3/2001

CONTAMINANT N

LINE SAMPLE DESCRIPTION

TEST

MATRIX

TEST

CRL Metals Data Review Checklist

Batch Number: 2001 005 3Facility: AEP-MarinParameter: ICP Metals

	Package Overview:		Review:
	Analyst	Peer	
Raw Data Package Complete?	/	/	
Results Reported Correctly?	/	/	
Special Requests Done?	-	/	
Calculations Checked?	/	/	
Calibration Not Exceeded?	/	/	
Field QC Checked?	/	/	NA
Quality Control:			
Holding Times Met?	NO	NO	
Preservation Checked?	-	NA	
Proper Digestion Verified?	/	/	
Initial Instrument Performance Checks Verified?	/	/	
Calibration Verification Checked?	/	/	
Sample-Specific QC (Internal Standards or Analytical Spikes) Okay?	/	/	
Matrix QC Checked?	-	NA	
Digestion Blanks Checked?	/	/	
Spiked Blank Checked?	/	/	
LCS (if applicable) Checked?	/	/	
Species QC (if applicable) Checked?	/	NA	
Final Check:			
Technical Review Done?	/	/	
Narrative Complete? (See sect. 7 of data review SOP, HK005)	/	/	

Analyst: K Swan Date: 110201Peer Reviewer: J Evans Date: 7 Nov 01

Comments Attached? (Y/N) _____

Narrative Date: 11 07 01
Analyst: K. Swan
Batch Number: 20010053
Study: AEP-Gavin
Parameter: ICP Metals

ICP NARRATIVE for Data Set 20010053

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Results file 20010043 1312 100601

The sample was digested and run along with data set 20010043, and the raw data for this run will be submitted with data for 20010043.

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Narrative by: K. Swan Chemist, USEPA
Date: 11 07 01

US EPA CRL - Region V
ICP Final Report Results

Sample Number: 2001AT01S01 Station ID: Fallout
Sample Batch Number: 20010053 Study: AEP-Gavin
Analysis Date: 11/06/01

<u>Element</u>	<u>Amount</u>	<u>Units</u>
Silver	1 U	mg/kg
Aluminum	9700	mg/kg
Boron	50	mg/kg
Barium	180	mg/kg
Beryllium	0.79	mg/kg
Calcium	22000	mg/kg
Cadmium	2 U	mg/kg
Cobalt	6.6	mg/kg
Chromium	15	mg/kg
Copper	13	mg/kg
Iron	9800	mg/kg
Potassium	590	mg/kg
Lithium	5.5	mg/kg
Magnesium	3700	mg/kg
Manganese	360	mg/kg
Molybdenum	10 U, J	mg/kg
Sodium	200 U	mg/kg
Nickel	15	mg/kg
Lead	10 U	mg/kg
Titanium	600 J	mg/kg
Vanadium	8.6	mg/kg
Zinc	66	mg/kg

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Sample ID	Date	Time
BLANK	11/06/01	01:21:05 PM
LCM1	11/06/01	01:24:51 PM
LCM2	11/06/01	01:28:41 PM
(1) Hi AQC	11/06/01	01:32:27 PM
LCM2	11/06/01	01:37:31 PM
Hi AQC	11/06/01	01:41:17 PM
Blank 2	11/06/01	01:45:18 PM
2001AT01S01	11/06/01	01:49:06 PM
2001WD04S20	11/06/01	01:53:08 PM
S20 DUP	11/06/01	01:57:04 PM
S20 SPK	11/06/01	02:00:58 PM
S20 HI SPK	11/06/01	02:04:52 PM
2001WD04S21	11/06/01	02:09:08 PM
2001WD04S25	11/06/01	02:13:21 PM
2001WD04S26	11/06/01	02:18:04 PM
2001WD04S27	11/06/01	02:22:20 PM
2001WD04S31	11/06/01	02:26:22 PM
2001WD04S32	11/06/01	02:30:20 PM
2001WD04S33	11/06/01	02:34:18 PM
2001WD04S37	11/06/01	02:38:09 PM
BLANK	11/06/01	02:42:12 PM
LCM1	11/06/01	02:46:12 PM
LCM2	11/06/01	02:50:35 PM
(2) Hi AQC	11/06/01	02:54:30 PM
Blank 2	11/06/01	02:58:43 PM
2001WD04S38	11/06/01	03:02:31 PM
2001WD04S39	11/06/01	03:06:31 PM
S39 DUP	11/06/01	03:10:46 PM
S39 SPK	11/06/01	03:14:53 PM
S39 HI SPK	11/06/01	03:19:29 PM
2001AT01S01	11/06/01	03:23:44 PM
LRB2	11/06/01	03:28:03 PM
BLANK	11/06/01	03:31:51 PM
LCM1	11/06/01	03:35:35 PM
LCM2	11/06/01	03:39:23 PM
(3) Hi AQC	11/06/01	03:43:32 PM

Instrument Blank First

Sample Batch Number: 20010053
Analysis Date: 11/06/01
Results Data Set: 20010043 1312 100601

QC	Element	Measured	Detection Limit	Units
Blank	Ag 328.068	-0.000	0.003	mg/L
	Al 308.215	0.021	0.025	mg/L
	B 249.677	-0.00	0.02	mg/L
	Ba 455.403	-0.0001	0.0004	mg/L
	Be 313.042	0.0001	0.0002	mg/L
	Ca 315.887	0.01	0.02	mg/L
	Cd 228.802	-0.000	0.006	mg/L
	Co 228.616	-0.001	0.004	mg/L
	Cr 283.563	0.001	0.006	mg/L
	Cu 324.752	0.001	0.003	mg/L
	Fe 273.955	0.00	0.02	mg/L
	K 766.490	0.1	0.7	mg/L
	Li 670.784	0.00	0.01	mg/L
	Mg 279.077	-0.01	0.03	mg/L
	Mn 257.610	-0.0002	0.0007	mg/L
	Mo 204.597	-0.00	0.03	mg/L
	Na 589.592	0.0	0.5	mg/L
	Ni 231.604	-0.001	0.003	mg/L
	Pb 220.353	-0.006	0.032	mg/L
	Sn 283.998	0.01	0.02	mg/L
	Ti 336.121	0.001	0.001	mg/L
	V 310.289	0.00	0.02	mg/L
	Zn 213.857	-0.00	0.01	mg/L

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Reagent Blank

Sample Batch Number: 20010053
 Analysis Date: 11/06/01
 Results Data Set: 20010043 1312 100601

QC	Element	Measured	Detection Limit	Units
Blank	Ag 328.068	-0.000	0.003	mg/L
	Al 308.215	0.059	0.025 out	mg/L
	B 249.677	0.014	0.02	mg/L
	Ba 455.403	0.001	0.0004 out	mg/L
	Be 313.042	-0.000	0.0002	mg/L
	Ca 315.887	0.329	0.02 out	mg/L
	Cd 228.802	-0.000	0.006	mg/L
	Co 228.616	0.000	0.004	mg/L
	Cr 283.563	0.001	0.006	mg/L
	Cu 324.752	0.001	0.003	mg/L
	Fe 273.955	0.046	0.02 out	mg/L
	K 766.490	-0.031	0.7	mg/L
	Li 670.784	-0.002	0.01	mg/L
	Mg 279.077	0.057	0.03 out	mg/L
	Mn 257.610	0.002	0.0007 out	mg/L
	Mo 204.597	0.001	0.03	mg/L
	Na 589.592	0.068	0.5	mg/L
	Ni 231.604	0.002	0.003	mg/L
	Pb 220.353	-0.017	0.032	mg/L
	Sn 283.998	0.002	0.02	mg/L
	Ti 336.121	0.003	0.001	mg/L
	V 310.289	-0.014	0.02	mg/L
	Zn 213.857	0.020	0.01	mg/L

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Instrument Blank

Second

Sample Batch Number: 20010053
Analysis Date: 11/06/01
Results Data Set: 20010043 1312 100601

QC	Element	Measured	Detection Limit	Units
Blank	Ag 328.068	-0.001	0.003	mg/L
	Al 308.215	0.002	0.025	mg/L
	B 249.677	0.00	0.02	mg/L
	Ba 455.403	0.0003	0.0004	mg/L
	Be 313.042	-0.0002	0.0002	mg/L
	Ca 315.887	0.69	0.02 out	mg/L
	Cd 228.802	-0.001	0.006	mg/L
	Co 228.616	-0.000	0.004	mg/L
	Cr 283.563	0.000	0.006	mg/L
	Cu 324.752	-0.002	0.003	mg/L
	Fe 273.955	0.03	0.02 out	mg/L
	K 766.490	-0.0	0.7	mg/L
	Li 670.784	-0.00	0.01	mg/L
	Mg 279.077	0.19	0.03 out	mg/L
	Mn 257.610	0.0006	0.0007	mg/L
	Mo 204.597	0.00	0.03	mg/L
	Na 589.592	0.1	0.5	mg/L
	Ni 231.604	0.000	0.003	mg/L
	Pb 220.353	-0.010	0.032	mg/L
	Sn 283.998	0.01	0.02	mg/L
	Ti 336.121	0.001	0.001	mg/L
	V 310.289	-0.01	0.02	mg/L
	Zn 213.857	0.00	0.01	mg/L

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Instrument QC First

Sample Batch Number: 20010053
 Analysis Date: 11/06/01
 Results Data Set: 20010043 1312 100601

QC	Element	Measured	Actual	Recovery	Units
LCM1	Ag 328.068	0.245	0.250	98.01%	mg/L
	Al 308.215	1.030	1.000	102.95%	mg/L
	B 249.677	0.928	1.000	92.77%	mg/L
	Ba 455.403	1.000	1.000	100.04%	mg/L
	Be 313.042	0.977	1.000	97.71%	mg/L
	Ca 315.887	1.136	1.000	113.64% out	mg/L
	Cd 228.802	0.974	1.000	97.38%	mg/L
	Co 228.616	0.975	1.000	97.47%	mg/L
	Cr 283.563	0.970	1.000	97.01%	mg/L
	Cu 324.752	1.023	1.000	102.25%	mg/L
	Fe 273.955	1.101	1.000	110.07% out	mg/L
	K 766.490	4.535	5.000	90.69%	mg/L
	Li 670.784	0.963	1.000	96.34%	mg/L
	Mg 279.077	1.010	1.000	100.98%	mg/L
	Mn 257.610	0.988	1.000	98.81%	mg/L
	Na 589.592	1.050	1.000	105.04%	mg/L
	Ni 231.604	0.989	1.000	98.86%	mg/L
	Pb 220.353	1.969	2.000	98.45%	mg/L
	V 310.230	0.972	1.000	97.21%	mg/L
	Zn 213.857	0.989	1.000	98.89%	mg/L
LCM2	Mo 204.597	0.864	1.000	86.37%	mg/L
	Sn 283.998	2.254	5.000	45.08%	mg/L
	Ti 336.121	0.888	1.000	88.80%	mg/L
Hi AQC	Al 308.215	98.556	100.000	98.56%	mg/L
	Ca 315.887	105.202	100.000	105.20%	mg/L
	Fe 273.955	106.817	100.000	106.82%	mg/L
	K 766.490	92.399	100.000	92.40%	mg/L
	Mg 279.077	59.641	60.000	99.40%	mg/L
	Na 589.592	98.961	100.000	98.96%	mg/L

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Instrument QC

Second

Sample Batch Number: 20010053
 Analysis Date: 11/06/01
 Results Data Set: 20010043 1312 100601

QC	Element	Measured	Actual	Recovery	Units
LCM1	Ag 328.068	0.241	0.250	96.36%	mg/L
	Al 308.215	0.947	1.000	94.74%	mg/L
	B 249.677	0.901	1.000	90.13%	mg/L
	Ba 455.403	1.001	1.000	100.13%	mg/L
	Be 313.042	0.947	1.000	94.71%	mg/L
	Ca 315.887	1.295	1.000	129.49% out	mg/L
	Cd 228.802	0.930	1.000	92.98%	mg/L
	Co 228.616	0.935	1.000	93.45%	mg/L
	Cr 283.563	0.947	1.000	94.71%	mg/L
	Cu 324.752	0.986	1.000	98.61%	mg/L
	Fe 273.955	1.100	1.000	110.03% out	mg/L
	K 766.490	4.433	5.000	88.65%	mg/L out
	Li 670.784	0.939	1.000	93.93%	mg/L
	Mg 279.077	1.076	1.000	107.59%	mg/L
	Mn 257.610	0.954	1.000	95.37%	mg/L
	Na 589.592	1.077	1.000	107.74%	mg/L
	Ni 231.604	0.958	1.000	95.80%	mg/L
	Pb 220.353	1.895	2.000	94.75%	mg/L
	V 310.230	0.946	1.000	94.56%	mg/L
	Zn 213.857	0.929	1.000	92.91%	mg/L
LCM2	Mo 204.597	0.779	1.000	77.85%	mg/L out
	Sn 283.998	2.110	5.000	42.20%	mg/L out
	Ti 336.121	0.853	1.000	85.26%	mg/L out
Hi AQC	Al 308.215	94.673	100.000	94.67%	mg/L
	Ca 315.887	101.834	100.000	101.83%	mg/L
	Fe 273.955	101.960	100.000	101.96%	mg/L
	K 766.490	90.166	100.000	90.17%	mg/L
	Mg 279.077	56.975	60.000	94.96%	mg/L
	Na 589.592	97.143	100.000	97.14%	mg/L

Sample Batch Number: 20010053
 Analysis Date: 10/02/01
 Results Data Set: 20010043 1312 100201

Element	Meas. (mg/kg)	"True" (mg/kg)	%Dev.	Control (mg/kg)	Limits (mg/kg)
Ag	21	20.85	0.72%	13.2	28.5
Al	300	308.65	-2.80%	193.1	424.2
Ba	4.9	5.3	-7.55%	2.5	8.1
Be	21	18.75	12.00%	15.3	22.2
Ca	200000	184154.5	8.60%	142933	225376
Cd	41	41.6	-1.44%	32.1	51.1
Co	150	140.5	6.76%	115.4	165.6
Cr	100	96.5	3.63%	77.8	115.2
Cu	6900	6680.2	3.29%	5727.3	7633.1
Mg	120000	113189.5	6.02%	97493	128886
Fe	25000	21012.15	18.98%	16831.3	25193
K	51	189.65	-73.11%	0	379.3
Mn	210	201.15	4.40%	167.9	234.4
Na	63	138.7	-54.58%	0	277.4
Ni	89	56.8	56.69%	43.5	70.1
Pb	150	224.05	-33.05%	167.6	280.5
V	81	65.8	23.10%	53	78.6
Zn	270	174.9	54.37%	127.7	222.1

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Report Level Check

Sample Batch Number: 20010053
 Analysis Date: 10/02/01
 Results Data Set: 20010043 1312 100201

QC	Element	Measured	Actual	Recovery	Units
RLC	Ag 328.068	0.005	0.01	54%	mg/L
	Al 308.215	0.140	0.1	140%	mg/L
	B 249.677	0.129	0.1	129%	mg/L
	Ba 455.403	0.002	0.002	112%	mg/L
	Be 313.042	0.001	0.001	103%	mg/L
	Ca 315.887	0.135	0.1	135%	mg/L
	Cd 228.802	0.020	0.02	101%	mg/L
	Co 228.616	0.026	0.02	131%	mg/L
	Cr 283.563	0.020	0.02	101%	mg/L
	Cu 324.752	0.013	0.01	130%	mg/L
	Fe 273.955	0.058	0.05	117%	mg/L
	K 766.490	2.471	2.5	99%	mg/L
	Li 670.784	0.033	0.05	67%	mg/L
	Mg 279.077	0.060	0.01	604%	mg/L
	Mn 257.610	0.004	0.005	85%	mg/L
	Mo 204.597	0.034	0.1	34%	mg/L
	Na 589.592	2.106	2	105%	mg/L
	Ni 231.604	-0.018	0.05	-37%	mg/L
	Pb 220.353	0.009	0.1	9%	mg/L
	Sn 283.998	-0.007	0.3	-2%	mg/L
	Ti 336.121	0.005	0.01	53%	mg/L
	V 310.289	0.061	0.02	305%	mg/L
	Zn 213.857	0.048	0.05	95%	mg/L

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SPIKE BLANK

Sample Batch Number: 20010053
 Analysis Date: 10/02/01

Element	Units	Spike	% Recovery	Spike II	Spike	% Recovery
		Added			Added	
Ag 328.068	mg/L	0.088	0.1	88		
B 249.677	mg/L	0.887	1.0	89	0.95	1
Ba 455.403	mg/L	0.479	0.5	96	4.92	5
Be 313.042	mg/L	0.046	0.1	91	0.05	0.05
Cd 228.802	mg/L	0.095	0.1	95	0.95	1
Co 228.616	mg/L	0.451	0.5	90	0.46	0.5
Cr 283.563	mg/L	0.453	0.5	91	4.70	5
Cu 324.752	mg/L	0.473	0.5	95	4.90	5
Li 670.784	mg/L	0.462	0.5	92	0.46	0.5
Mn 257.610	mg/L	1.842	2.0	92	9.47	10
Mo 204.597	mg/L	0.844	1.0	84		
Ni 231.604	mg/L	0.459	0.5	92	1.86	2
Pb 220.353	mg/L	0.843	1.0	84	4.71	5
V 309.310	mg/L	0.439	0.5	88	0.48	0.5
Zn 213.857	mg/L	0.879	1.0	88	9.22	10

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11/01/01

Sample ID	Date	Time
BLANK	10/02/01	11:40:04 AM
LCM1	10/02/01	11:43:48 AM
LCM2	10/02/01	11:47:34 AM
Hi AQC	10/02/01	11:51:20 AM
Blank 2	10/02/01	11:55:12 AM
2001WD04S01	10/02/01	11:58:59 AM
S01 DUP	10/02/01	12:03:33 PM
S01 SPK	10/02/01	12:07:48 PM
S01 HI SPK	10/02/01	12:11:55 PM
Blank 2	10/02/01	12:16:16 PM
LRB	10/02/01	12:20:37 PM
LFB	10/02/01	12:24:45 PM
LFB HI	10/02/01	12:29:02 PM
LCS 0287	10/02/01	12:32:52 PM
2001WD04S02	10/02/01	12:37:06 PM
2001WD04S03	10/02/01	12:41:37 PM
2001WD04S07	10/02/01	12:45:55 PM
2001WD04S08	10/02/01	12:49:57 PM
2001WD04S09	10/02/01	12:54:27 PM
2001WD04S13	10/02/01	12:58:22 PM
2001WD04S14	10/02/01	01:02:35 PM
2001WD04S15	10/02/01	01:07:07 PM
2001WD01S19	10/02/01	01:11:22 PM
BLANK	10/02/01	01:15:14 PM
LCM1	10/02/01	01:18:58 PM
LCM2	10/02/01	01:22:44 PM
Hi AQC	10/02/01	01:26:42 PM
Blank 2	10/02/01	01:30:33 PM
RLC	10/02/01	01:34:35 PM
SIC AsTi	10/02/01	01:38:20 PM
SIC AlFe	10/02/01	01:42:10 PM
BLANK	10/02/01	01:45:57 PM
LCM1	10/02/01	01:50:29 PM
LCM2	10/02/01	01:54:15 PM
Hi AQC	10/02/01	01:58:01 PM
2001WD04S20	10/02/01	02:17:42 PM
S20 DUP	10/02/01	02:21:30 PM
S20 SPK	10/02/01	02:25:20 PM
S20 HI SPK	10/02/01	02:29:49 PM
2001WD04S21	10/02/01	02:34:08 PM
2001WD04S25	10/02/01	02:38:20 PM
2001WD04S26	10/02/01	02:42:10 PM
2001WD04S27	10/02/01	02:46:02 PM
2001WD04S31	10/02/01	02:49:58 PM
2001WD04S32	10/02/01	02:54:30 PM
2001WD04S33	10/02/01	02:58:45 PM
2001WD04S37	10/02/01	03:02:34 PM
2001WD04S38	10/02/01	03:06:27 PM
BLANK	10/02/01	03:10:18 PM
LCM1	10/02/01	03:14:02 PM
LCM2	10/02/01	03:17:48 PM
Hi AQC	10/02/01	03:21:34 PM
Blank 2	10/02/01	03:25:25 PM
2001WD04S39	10/02/01	03:29:13 PM
S39 DUP	10/02/01	03:33:06 PM
S39 SPK	10/02/01	03:37:28 PM
S39 HI SPK	10/02/01	03:41:59 PM
2001AT01S01	10/02/01	03:46:11 PM
LRB2	10/02/01	03:50:01 PM
BLANK	10/02/01	03:53:48 PM
LCM1	10/02/01	03:57:31 PM
LCM2	10/02/01	04:01:17 PM
Hi AQC	10/02/01	04:05:02 PM
Hi AQC	10/02/01	04:10:40 PM

METALS SAMPLE PREPARATION RECORD

Prepared by: KS
 Digestion Method: 200.2
hot block sed

Run Number: 1312
 Date: Sept 25 01

Vessel Number	Data Set Number	Sample Number	pH < 2?	Sample Description (Color, Clarity, Texture, Artifacts, etc...)		Remarks
			Y/N*	Before Prep.	After Prep.	
1	20010043	S01		~50 do stones *		0.4518 g
2		S01 dup		"		0.4513
3		S01 spk		"		0.4567
4		S01 Hi spk		"		0.4723
5		S01 AASpk		"		0.4919
6		blank				
7		LFB				
8		LFB hi				
9		LFB AA				
10		LCS 0287				0.2245
11		S02		~40 do * stones		0.4586
12		S03		~50 do "		0.4522
13		S07		~30 do "		0.4969
14		S08		~40 do "		0.4563
15		S09		~10 do "		0.4327
16		S13		~25 do "		0.4492
17		S14		Fairly homogeneous		0.4667
18		S15		~15 do * stones		0.4919

* Please note: A minimum of 16 hours from time of sampling must elapse before pH of sample can be taken.

If pH > 2, record and date in the Remarks column the actual pH and the amount of acid added to bring pH to < 2.

Comments: SPIKE = 5 ml ea Round Bottom Ag Mo S₄

* subsampled the powder, only

Li spk = 5 ml in spike soln, 2001

AASpk = 0.5 ml (

METALS SAMPLE PREPARATION RECORD

Prepared by: _____
Digestion Method: _____Run Number: 1312
Date: _____

Vessel Number	Data Set Number	Sample Number 2001 WD04	pH < 2?	Sample Description (Color, Clarity, Texture, Artifacts, etc...)		Remarks
			Y/N*	Before Prep.	After Prep.	
19		S19		~10° stones *		0.4481g
20		S20		~30° "		0.4388
21		S20dup		"		0.4485
22		S20spk		"		0.4465
23		S20hispk		"		0.4350
24		S2044spk		"		0.4721
25		S21		~30° "		0.4504
26		S25		~20° "		0.4700
27		S26		~40° "		0.4705
28		S27		~40° "		0.4685
29		S31		~40° "		0.5055
30		S32		~10° "		0.4766
31		S33		~40° "		0.4826
32		S37		~40° "		0.4985
33		S38		~30° "		0.4402
34		blank				
35		blank				
36		blank				

* Please note: A minimum of 16 hours from time of sampling must elapse before pH of sample can be taken.

If pH > 2, record and date in the Remarks column the actual pH and the amount of acid added to bring pH to < 2.

Comments:

* Subsample fed the powder, P only

METALS SAMPLE PREPARATION RECORD

Prepared by: _____
Digestion Method: _____

Run Number: 1312
Date: _____

Vessel Number	Data Set Number	Sample Number	pH < 2?	Sample Description (Color, Clarity, Texture, Artifacts, etc...)		Remarks
			Y/N*	Before Prep.	After Prep.	
37		S39		~30 ^{do} stones*		0.4358g
38		S39dulp.	"			6.5097
39		S39spk	"			0.4660
40		S39 h; spk	"			6.4590
41		S39 AAspt	"			0.492●
42	20010053	2001A70 ¹ soil				6.5000
423		blank				
"						

* Please note: A minimum of 16 hours from time of sampling must elapse before pH of sample can be taken.
If pH > 2, record and date in the Remarks column the actual pH and the amount of acid added to bring pH to < 2.

Comments:

* Subsampled the powder, only